

CLAIMS

1. A hearing aid comprising a central, digital signal processing unit (1) connected at its inputs and outputs to digital, hybrid and/or analogue peripherals (3E, 3A)

characterized in that

at least some of the peripherals each comprise one identification unit (5) of which the output is connected to the input of a comparator (9), this comparator being connected at its input to a memory (11) storing possible identifications while its output drives a configuration memory (15).

2. Hearing aid as claimed in claim 1, characterized in that the output of the comparator (9) is connected to the operations-selecting input (17) of the signal processing unit (1).

3. Hearing aid as claimed in either of claims 1 and 2, characterized in that at least one bus and peripherals implement the connection between peripherals and the central signal processing unit.

4. Hearing aid as claimed in one of claims 1 through 3, characterized in that the hearing aid comprises an output (HG_A , HG'_A) connected to the configuration memory (15).

5. Hearing aid as claimed in claim 3, characterized in that the interfaces include three-wire interfaces and/or two-wire interfaces.

6. Hearing aid as claimed in claim 3, characterized in that the audio signal components in the form of peripherals are connected through a first bus and first interfaces to the signal processing unit and in the form of peripherals are connected through a second

Claim 6 carries
to next page

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bus and second interfaces to the signal processing unit, the first peripherals preferably being at least three-wire interfaces, the second interfaces preferably being at least two-wire interfaces, the former preferably being based on I²S interfaces and the latter preferably being based on I²C interfaces.

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7. Hearing aid as claimed in one of claims 1 through 6, characterized in that the peripherals include one or more components: sensors, actuators, transceivers, manual selection switches, potentiometers.

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8. Hearing aid as claimed in claim 4, characterized in that the output is in the form of a transceiver.

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9. A method for manufacturing a hearing aid comprising a central, digital signal processing unit and, associated with latter, a peripheral, characterized in that the peripherals are installed jointly with the central digital signal processing unit and then the identities of the peripherals are automatically interrogated and stored.

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10. Method as claimed in claim 9, characterized in that the operation of the signal processing unit is selected by means of the interrogated identities of the peripheral, preferably that operation extraneous to implementing one of the peripherals shall be precluded.

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11. Method as claimed in either of claims 9 and 10, characterized in that based on said identification, signals at the connections to and/or from the digital signal processing unit shall be interpreted in different manners.

Ins (2)

ABSTRACT

5 The invention proposes a hearing aid fitted with a central processing unit (1). Said unit comprises peripherals (3E, 3A) at its input and output resp. Each peripheral comprises an identification unit (5) of which the output is connected to the input of a comparator (9). The comparator in turn is connected with further identification capabilities -- memories (11) -- and its output drives a configuration memory (15). As a result the hearing aid configuration is self-identifying by means of the peripherals.